



United States
Department of
Agriculture

Forest
Service

Northeastern Area
State & Private
Forestry

180 Canfield Street
Morgantown, WV 26505-3101

File Code: 3430 (NA-04-09)
Date: November 19, 2003

Subject: Hemlock Woolly Adelgid

To: Clyde Thompson, Forest Supervisor
Monongahela National Forest

The hemlock woolly adelgid, *Adelges tsugae* (HWA), was introduced into the Eastern United States from Asia in the early 1950s near Richmond, Virginia. The adelgid was present on some exotic tree species that a private collector planted in his arboretum. The distribution of the HWA remained localized until the 1960s. The population has since spread throughout the Northeastern United States. Hemlock woolly adelgid has been present on the Monongahela since 1992 and is now found throughout most of the forest. The impact on the host species, eastern hemlock (*Tsuga canadensis*), is severe. Significant tree mortality usually occurs within 4 to 7 years after infestation. This insect pest not only threatens the hemlock resource but also threatens the unique ecosystem it helps to comprise.

The Monongahela National Forest (MNF) is currently experiencing decline and mortality of the hemlock resource due to the HWA. For this reason, Lewis Blodgett, the MNF HWA coordinator from the Gauley Ranger District, contacted Forest Health Protection in the Morgantown Field Office to evaluate the impact HWA is having on several areas in the Southern Zone of the forest. Forest Health Protection recommends that biological control agents and suppression be used to control HWA populations in suitable high-use recreation areas. HWA populations were present in all areas evaluated. Treatment of HWA in such areas is possible in most instances and will help maintain the hemlock component in these areas. The treatment of such recreation and scenic areas would minimize the HWA impact and curtail expenses associated with hazard trees. If treatment is not implemented, the hazard tree issue will require one or all of the following, depending on the percentage of hemlock in the recreation area: tree removal, tree replacement, closure of the area, and/or movement of the area to a new site. Closing or moving a recreation area will be cost prohibitive and is not a realistic option; therefore, control is recommended. The loss of hemlock would also impact the visual quality of many of these high-use areas.

Suppression and biological control agents of the HWA would be used only in areas of high resource value with a large hemlock component (> 30 percent of the basal area). Release of biological control agents and treatment should begin under the direction of Forest Health Protection in the fall of 2003 and continue into the spring and fall of 2004. The biological control agents *Pseudoscymnus tsugae* (already released through a CE at the Fanny Bennett tract) and *Laricobius nigrinus* are natural enemies that are highly host specific to HWA, and as research projects, should fall under category 3, section 31.1a (FSH 1909.15) of actions, which may be categorically excluded from documentation. These projects will help document the effectiveness of these natural enemies as part of a long-term control strategy. The chemical



Caring for the Land and Serving People

control materials to be used include imidacloprid, insecticidal soap, or horticultural oil, but are not limited to these. The control materials have proven effective at reducing HWA populations by as much as 99 percent and have minimal effects on the environment. These substances would be applied using hydraulic injection or spray equipment from the ground or a bucket truck. All safety precautions would be observed during treatment and pesticide label directions will be strictly followed. The application of such pesticides with this type of equipment should not require NEPA documentation and should be categorically excluded according to Environmental Policies 1909.15 section 31.1b.5b., applying registered pesticides to control insects in developed recreation areas.

If you have any questions or need any more information please feel free to contact Rick Turcotte at (304) 285-1544.

Sincerely,

JOHN W. HAZEL
Field Representative
Morgantown Field Office

Cc: District Ranger, Gauley RD
District Ranger, Marlinton & White Sulphur Springs
Lewis Blodgett, MNF HWA Coordinator, Gauley RD

RMT